

Two new Braconid Parasites of *Loxostege frustalis* Zell. in South Africa.

by

G. E. J. NIXON.

Commonwealth Institute of Entomology, London.

submitted through H. K. Muro, Division of Entomology, Pretoria.

The reasons for bringing forward these two descriptions have been given by my colleague, G. J. Kerrich, in a companion paper in the current number of this journal.

Subfamily MACROCENTRINAE

Macrocentrus maraisi sp.n.

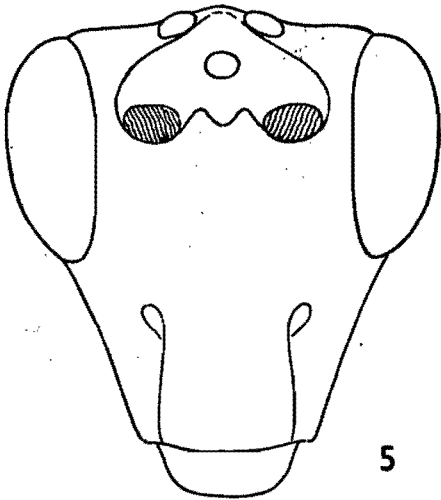
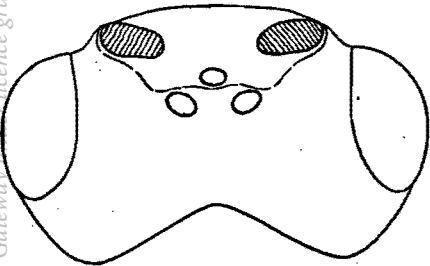
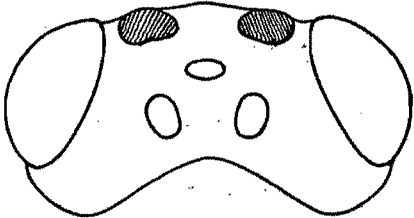
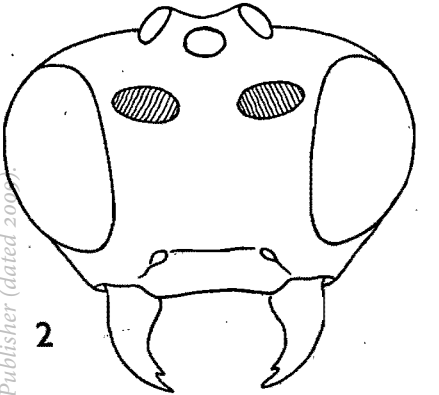
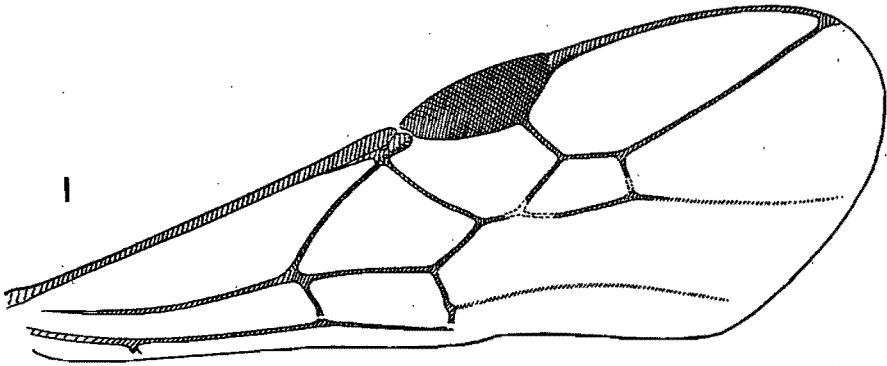
♂ ♀. Bicoloured; head and thorax, except propodeum and metapleura, fulvous red; propodeum (and to a less extent the metapleura) and at least the basal and more apical segments of the gaster, blackened; all the coxae, trochanters and femora pale but the hind tibiae and, more deeply, all the tarsi, blackened. Stemmaticum black. Scape blackish but reddened beneath; flagellum evenly blackish throughout. Wings evenly hyaline.

♀. Head from above and in front as in figures 2 & 3. Frons and vertex virtually impunctate. Face very feebly but evenly convex, finely punctate. Clypeus strongly transverse, its apical margin slightly concave. Eyes hardly convergent below, the shortest distance between them slightly greater than their length as seen from in front, 22:19. Ocelli large, the hind pair separated by slightly less than their longer diameter; a posterior ocellus is separated from the eye-margin by slightly less than $1\frac{1}{2}$ times its longer diameter. Antenna with 52—55 segments; antennal socket separated from the eye-margin by a distance equal to slightly more than $\frac{1}{3}$ its width as seen from in front.

Thorax: Middle lobe of mesoscutum somewhat broadly truncate in front;

LEGEND

1. *Macrocentrus maraisi* sp.n., fore wing, ♀;
2. *Macrocentrus maraisi* sp.n., head (from in front), ♀;
3. *Macrocentrus maraisi* sp.n., head (from above), ♀;
4. *Cremnops frustalis* sp.n., head (from above), ♀;
5. *Cremnops frustalis* sp.n., head (from in front), ♀.



4

5

lateral lobes punctate on their inner side; notaulices of usual form but forming a somewhat shallow, irregularly foveate furrow posteriorly. Mesopleura closely, sharply punctate all over, the punctures separated by about one diameter. Propodeum finely transversely rugose-reticulate. Fore-wing (fig. 1); 2nd abscissa of the radius variable in length but usually distinctly a little longer than the 1st intercubitus; submedian cell of fore-wing showing normal pubescence. Inner spur of the hind tibia not reaching to middle of hind tarsus 1; apical trochanter of hind leg with 4—5 apical teeth; no teeth on femur beyond these trochanteral teeth; all claws with an angular basal lobe.

Gaster: Tergite 1 about $2\frac{1}{3}$ times as long as its apical width, distinctly a little widened towards apex, usually finely striate but sometimes the sculpture fading and leaving the surface smooth and shining except for traces of sculpture laterally. Tergite (2+3) finely striate as far as the suture; posterior to the suture the amount of sculpture is very variable. Spiracles of tergite 1 slightly nearer to base of segment than they are to each other. Ovipositor sheaths as long as the whole body.

♂. Like the female except for the sexual differences.

Length: ♂ ♀, 6.5—7 mm. (without ovipositor of female).

CAPE PROVINCE: Middelburg, 47 ♂♂, 45 ♀♀ (one the type), bred Nov.-Dec. ex *Loxostege frustalis* Zell. (S. J. S. Marais).

The only material in the British Museum available for comparison with this species are the types of *M. annulicornis* Cam. and *M. latisulcatus* Cam. These two species of Cameron are identical and the name '*latisulcatus*' has page priority. *M. latisulcatus* differs from *maraisi* in being entirely fulvous and in having the sculpture of tergites 1 and (2+3) as far as the suture, more strongly and evenly striate, so that the surface appears duller.

Subfamily AGATHINAE

Cremnops frustalis sp.n.

♂ ♀. Entirely reddish with at most the head blackened and then to a variable degree; rarely the head entirely pale; much more frequently the clypeal area, the cheeks and temples reddish with the head almost entirely black above. Wings very strongly darkened with a pale band that cuts the proximal half of the stigma; radial cell of hind wing hyaline over proximal third.

♀. Head from above and in front as in figures 4 & 5. Face finely punctate, the punctures irregular and elongate along the middle line. Keel between outer edge of antennal sockets and posterior ocelli not sharp. Area between the antennal sockets longitudinally furrowed and hence weakly bilobed. Ocelli in an equilateral triangle. Maxillary palpus with long, bristle-like hairs, the longest of which equal the length of the 2nd (longest) segment. Antenna with 41—42 segments; scape simple.

Thorax: The two pits at side of pronotum separated by a bridge. Lobes of

the mesoscutum sparsely and inconspicuously punctate; notaulices foveate. Propodeum with a narrow, triangular, closed area. Mesopleura smooth, shining, sparsely punctate below and with only a very feebly furrow. Hind coxa above dull, coarsely rugose-reticulate; hind femur short, rather thick, punctate on its outer side; hind tibia at apex with a cluster of 16—18 stout spines; basal segment of hind tarsus only slightly longer than the following segments together, 27:23; claws deeply cleft.

Gaster smooth, shining. Ovipositor sheaths about $\frac{3}{4}$ as long as the gaster.

♂. Maxillary palpus with only short hairs, none of which is longer than the 4th segment.

Length: ♂ ♀, 7—7.5 mm.

CAPE PROVINCE: Middelburg, 36 ♀ ♀ (one the type), 26 ♂ ♂, bred Nov.-Feb. ex *Loxostege frustalis* Zell. (S. J. S. Marais).

A comparison with the few species of *Cremnops* represented in the British Museum collection suggests that the important characters for recognising *frustalis* are: (1) the long hairs of the maxillary palpus of the female, (2) the form of the frons between the antennal sockets and (3) the strong sculpture of the upper surface of the hind coxae.

This species was originally believed to be *Cremnops vulgaris* Cresson, a North American species released in Cape Province in 1946 for the control of *Loxostege*. *C. vulgaris*, according to Morrison's key to the North American species (1917), has the apex of the scape produced to form a short tooth. There are two specimens of *vulgaris* in the B. M. named by C. F. W. Muesebeck of the United States Bureau of Entomology and they are undoubtedly *vulgaris* as defined by Morrison. These two specimens have the palpi shorter than in *frustalis*, black, shiny and clothed only with very short hairs.

REFERENCES

- CAMERON, P. 1911. On the parasitic Hymenoptera collected by Mr. A. J. T. Janse Transvaal, *Ann. Transvaal Mus.* 2: 173.
- MORRISON, H. 1917. Monograph of the Nearctic Hymenoptera of the Genus Bracon Fabricius, *Proc. U.S.N.M.* 52: 305.